

385930118373101 Local number 110A N13 E30 15BCBC1

Basin and Range basin-fill aquifers

Mineral County, NV

LOCATION.--Lat 38°59'29.5", long 118°37'31.2" referenced to North American Datum of 1983, in NW ¼ SW ¼ NW ¼ sec.15, T.13 N., R.30 E., Mineral County, Hydrologic Unit 16050303.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Depth 84 ft. Upper casing diameter 6 in; top of first opening undefined, bottom of last opening undefined.

WELL USE.--Unused.

DATUM.--Land-surface datum is 4070 ft above National Geodetic Vertical Datum of 1929. Measuring point: Narrow slot between lid of casing, requires steel tape with no weight on it, -0.3 ft below land-surface datum.

REMARKS.--Walker Lake is a perennial, natural terminal lake that became at-risk because of upstream agricultural diversions. Between 1882 and 1994, upstream diversions caused Walker Lake to decline about 140 feet and the total dissolved solids (TDS) concentrations to increase from 2,500 mg/L to 13,300 mg/L. The Lahontan cutthroat trout (LCT), a threatened species that is native to Walker Lake, has adapted to the high TDS of terminal basins. However, diversions have lowered lake levels and increased TDS to concentrations that threaten the survival of the LCT. The objectives of this project are to develop (1) an improved water budget for Walker Lake and (2) the capability to predict how changes in irrigation practices in and below Mason Valley will affect flows in the lower Walker River so alternatives for supplementing flows can be evaluated.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

[Measurement method: S, steel tape. Water-level status: --, static.]

| Date | Water level | Measurement method | Water level status |
|--------------|-------------|--------------------|--------------------|
| Dec 13, 2004 | 33.90 | S | -- |
| Jan 20, 2005 | 33.85 | S | -- |
| Mar 2 | 33.73 | S | -- |
| Apr 6 | 33.87 | S | -- |
| May 10 | 33.71 | S | -- |
| Jun 9 | 33.74 | S | -- |
| Sep 7 | 34.00 | S | -- |
| 29 | 33.77 | S | -- |

Highest: 33.71 May 10, 2005

Lowest: 34.00 Sep 07, 2005